

AMENDED IN ASSEMBLY MAY 7, 2003

AMENDED IN ASSEMBLY APRIL 10, 2003

CALIFORNIA LEGISLATURE—2003–04 REGULAR SESSION

ASSEMBLY BILL

No. 826

Introduced by Assembly Member Jackson
(Coauthors: Assembly Members Laird and Lieber)

February 20, 2003

An act to add Article 12.5 (commencing with Section 25249.1) to Chapter 6.5 of Division 20 of the Health and Safety Code, relating to hazardous waste.

LEGISLATIVE COUNSEL'S DIGEST

AB 826, as amended, Jackson. The Perchlorate Contamination Prevention Act.

Existing law, administered by the Department of Toxic Substances Control, prohibits the management of hazardous waste, except in accordance with the hazardous waste laws or in the regulations adopted by the department. A violation of the hazardous waste control law is a crime.

This bill would enact the Perchlorate Contamination Prevention Act, under which the department would administer the Perchlorate Contamination Prevention Program.

The bill would require the department to establish an integrated perchlorate survey program, as part of which *would require* the department ~~would be required~~ to request information from specified agencies or entities regarding perchlorate materials or perchlorate-containing waste, to prepare an inventory of perchlorate

facilities and suspected perchlorate release sites, and report to the Legislature, as specified.

~~This~~ The bill would also require perchlorate facilities, as defined, to have an unsaturated zone monitoring, as described in the bill, except as specified, and to meet other requirements.

The bill would require that existing groundwater monitoring wells in the state, emplaced for whatever purpose, be available for use as early warning or sentinel wells to warn of impending threat to drinking water resources, and that the department develop protocols and procedures for conducting groundwater monitoring or perchlorate sentinel wells.

Because a violation of the bill's requirements would be a crime, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. This act shall be known, and may be cited, as the
2 Perchlorate Contamination Prevention Act.

3 SEC. 2. (a) The Legislature finds and declares all of the
4 following:

5 (1) The State Department of Health Services, in the year 2000,
6 reported detections of perchlorate in 44 public drinking water
7 systems, with 23 systems indicating levels greater than 18 part per
8 billion.

9 (2) This perchlorate contamination has been found statewide,
10 including areas in Los Angeles, Pasadena, Riverside, Sacramento,
11 San Bernardino, and Santa Clarita.

12 (3) Perchlorate can persist for many years in ground and
13 surface water, and it is difficult to remove perchlorate with
14 standard water treatment processes.

15 (4) Perchlorate has been found in scientific studies to disrupt
16 thyroid hormone production, which hinders the body's ability to
17 regulate its metabolism and physical growth.



(5) Pregnant women and their developing fetuses may suffer the most serious health effects from perchlorate contamination in drinking water, including improper thyroid functioning and inhibition of iodine intake.

(6) The Office of Environmental Health Hazard Assessment is proposing a public health goal within the range of 2 to 6 parts per billion of perchlorate in water.

(7) An awareness of the problem caused by perchlorate materials and wastes has increased and information has become available from investigation of groundwater contamination at various sites.

(8) Perchlorate materials and wastes are associated with, among other things, solid rocket propellants, explosives, fireworks, flares, airbags, and some fertilizers.

(9) The discharge of perchlorate waste into the environment through air, surface and subsurface soils, surface water and groundwater media is a threat to water supply and to wildlife habitat, such as wetlands.

(b) It is the intent of the Legislature to enact legislation to establish a continuing program for the purpose of preventing contamination from management of perchlorate material and from generation, storage, treatment, and disposal of perchlorate or perchlorate-containing waste relative to emissions into the air and subsequent deposition and runoff into surface water or groundwater, and direct or indirect discharge to surface soils, subsurface soils, surface water, or groundwater of the State of California.

SEC. 3. Article 12.5 (commencing with Section 25249.1) is added to Chapter 6.5 of Division 20 of the Health and Safety Code, to read:

Article 12.5. The Perchlorate Contamination Prevention Program

25249.1. For purposes of this article, the following definitions apply:

(a) "Department" means the Department of Toxic Substances Control.

1 (b) “Perchlorate” means all perchlorate-containing
2 compounds, including ammonium, potassium, magnesium, or
3 sodium perchlorate.

4 (c) “Perchlorate disposal” means either of the following:

5 (1) The discharge, deposit, injection, dumping, spilling,
6 leaking, or placing of ~~any~~ perchlorate waste so that the waste or
7 any constituent of the waste is or may be emitted into the air or
8 discharged into or on ~~any~~ land or waters, including, but not limited
9 to, groundwater, or may otherwise enter the environment.

10 (2) The abandonment of ~~any~~ perchlorate waste.

11 (d) “Perchlorate facility” means the structures, appurtenances,
12 and improvements on the land, and all contiguous land, that are
13 associated with the management of perchlorate material or with
14 the generation, storage, treatment, or disposal of perchlorate or
15 perchlorate-containing waste. A facility may consist of ~~any~~
16 material or waste management units, hazardous or nonhazardous,
17 including, but not limited to, surface impoundments, landfills,
18 underground tanks, aboveground tanks, sumps, pits, or ponds.

19 (e) “Perchlorate generator” means a person who generates
20 hazardous perchlorate or perchlorate-containing waste at an
21 individual site. A perchlorate generator includes, but is not limited
22 to, a person who is identified on a manifest as the generator and
23 whose identification number is listed on that manifest, if that
24 information was provided by that person or an agent or employee
25 of that person.

26 (f) “Perchlorate handling” means the transporting or
27 transferring of perchlorate from one place or another, or the
28 pumping, processing, storing, or packaging of perchlorate, before
29 it becomes a waste or perchlorate-containing waste.

30 (g) “Perchlorate material” means perchlorate and all
31 *perchlorate-containing substances that may be used in a*
32 *producing, manufacturing, or processing operation.*

33 (h) “Perchlorate unit” means a unit where perchlorate liquid or
34 perchlorate-containing waste liquids are managed.

35 (i) “Perchlorate waste” means all
36 *perchlorate-containing liquid, solid, semi-solid, particulate, or*
37 *gaseous waste substances associated with a producing,*
38 *manufacturing, or processing operation prior to, and for purposes*
39 *of, disposal.*



(j) “Person” means an individual, trust, firm, joint stock company, business concern, partnership, limited liability company, association, or corporation, including, but not limited to, a government corporation. “Person” also includes ~~any~~ a city, county, district, commission, the state or a department, agency, or political subdivision thereof, an interstate body, or the federal government or a department or agency thereof to the extent permitted by law.

(k) “Owner or operator” means ~~=====~~ *a person who owns or operates a perchlorate facility or part of a perchlorate facility.*

(l) “Treatment” means ~~any method~~ ~~=====~~ *a method, technique, or process that changes or is designed to change the physical, chemical, or biological character or composition of a hazardous waste or any material contained therein, to remove or reduce its harmful properties or characteristics.*

25249.2. The department shall establish an integrated perchlorate survey program. As part of this program, the department shall do all of the following:

(a) Notify the California State Water Resources Control Board, regional water quality control boards, the Department of Fish and Game, the California Integrated Waste Management Board, the California Air Resources Board, local air quality management districts, local health officers, county directors of environmental health, and certified unified program agencies that the department requests that each of these agencies or entities do all of the following:

(1) As part of the entity’s or agency’s duties, including local inspection programs, report to the department ~~any~~ all facilities, areas, or sites using, accepting, storing, or transporting perchlorate materials, or generating, transporting, transferring, storing, treating, or disposing of perchlorate-containing waste in California.

(2) As part of each entity’s or agency’s duties, report to the department ~~any~~ all facilities or sites where perchlorate materials or perchlorate-containing waste have been discharged to the air, surface soils, subsurface soils, surface water, or groundwater of California.

(3) As part of each entity’s or agency’s regular activities, notify the department of facilities or sites described in paragraph (1) or (2), in writing, at least quarterly.

(b) Prepare an inventory of all perchlorate facilities and all suspected perchlorate release sites, and maintain a database of those facilities.

(c) Report to the Legislature on or before ~~_____~~, *January 1, 2005, and annually thereafter* and include in annual reports to the Legislature thereafter, an update on the progress of the perchlorate inventory, identifying which entities or agencies have reported facilities or sites to the department.

(d) Make the database available on the Internet to the public, other agencies, and water purveyors.

25249.3. (a) Except as provided in subdivision (g), all inground sumps, piping, and ~~_____~~ *other appurtenant devices* used by a perchlorate facility to convey or store perchlorate-containing materials and wastes shall have unsaturated zone monitoring.

(b) The department shall do all of the following:

(1) Develop protocols and procedures for conducting vadose zone monitoring of perchlorate material and waste storage and conveyance devices. These procedures shall address devices including, but not limited to, piping, sumps, and tanks.

(2) Require the owner or operator of a perchlorate facility to establish and pay for an unsaturated zone monitoring system for each unit where perchlorate liquid or perchlorate-containing waste liquid are managed.

(c) ~~Any~~ *The owners and operators of a perchlorate facility* located within $\frac{1}{2}$ mile upgradient of a potential source of drinking water shall comply with protocols and procedures, developed by the department pursuant to subdivision (b), for vadose zone monitoring.

(d) The unsaturated zone monitoring system shall include, at a minimum:

(1) A sufficient number of background monitoring points established at appropriate locations and depths to yield soil-pore liquid samples or soil-pore measurements that represent the quality of soil-pore liquid that has not been affected by a release from the perchlorate unit.

(2) A sufficient number of monitoring points established at appropriate locations and depths to yield soil-pore liquid samples or soil-pore liquid measurements that provide the best assurance of the earliest possible detection of a release from a perchlorate unit.

(3) Consistent sampling and analytical procedures that are designed to ensure that monitoring results provide a reliable indication of water quality at all monitoring points and background monitoring points. At a minimum, the program shall include:

(A) Sample collection, such as purging techniques, sampling equipment, and decontamination of sampling equipment.

(B) Sample preservation and shipment.

(C) Analytical procedures.

(D) Chain-of-custody control.

(4) Appropriate sampling and analytical methods for soil-pore liquid in the unsaturated zone that accurately measure the concentration of perchlorate and the concentration of, or value of, any monitoring parameter.

(e) Background monitoring points shall be installed at a background plot having soil characteristics similar to those of the soil underlying the perchlorate unit.

(f) Liquid recovery types of unsaturated zone monitoring, such as the use of lysimeters, are required unless the owner or operator demonstrates to the department's satisfaction that these methods of unsaturated zone monitoring cannot provide an indication of a release from a specific unit. Complementary or alternative types of unsaturated zone monitoring, such as nonliquid recovery, are required, as necessary, to provide the best assurance of the earliest possible detection of a release from a perchlorate unit.

(g) (1) Unsaturated zone monitoring is required unless the owner or operator demonstrates to the satisfaction of the department either that there is no unsaturated zone monitoring device or method designed to operate under the subsurface conditions existing at that unit, or that the installation of unsaturated zone monitoring devices would require unreasonable dismantling or relocating of permanent structures. If the department is satisfied with the owner's or operator's demonstration, then the owner or operator shall install a groundwater monitoring system to monitor the uppermost aquifer and ~~any~~ *all* intermediate perched groundwater for that unit.

(2) If a facility contains contiguous units, separate groundwater monitoring systems are not required for each unit if the owner or operator demonstrates to the satisfaction of the department that the

1 groundwater monitoring system will provide the earliest possible
2 detection and measurement of release from the contiguous units.

3 (3) The department shall utilize a registered geologist or
4 certified engineer to determine satisfaction with the owner's or
5 operator's demonstration.

6 (h) All monitoring systems, in both saturated and unsaturated
7 zones, shall be designed and certified by a registered geologist or
8 registered civil engineer. The department shall utilize a registered
9 geologist or certified engineer to evaluate all monitoring systems.

10 (i) All monitoring points and other borings drilled to satisfy the
11 requirements of this section shall be logged during drilling under
12 the direct supervision of a registered geologist, who shall
13 demonstrate span-of-control. These logs shall be submitted to the
14 department as part of an installation report.

15 (j) Soil shall be described in the geologic log according to the
16 Unified Soil Classification System as presented in Geotechnical
17 Branch Training Manuals Numbers 4, 5, and 6, published by the
18 United States Bureau of Reclamation, January 1986. Rock shall be
19 described in the geologic log in a manner appropriate for the
20 purpose of the investigation.

21 25249.4. (a) Existing groundwater monitoring wells in the
22 State of California, emplaced for whatever purpose, shall be
23 available for use as early warning or sentinel wells to warn of
24 impending threat to drinking water resources.

25 (b) The department shall develop protocols and procedures for
26 conducting groundwater monitoring of perchlorate sentinel wells.

27 (c) For purposes of this section, ~~any~~ all potential sentinel wells
28 within $\frac{1}{2}$ mile downgradient of a perchlorate facility and within
29 or connected to a potential source of drinking water shall comply
30 with protocols and procedures for groundwater monitoring.

31 SEC. 4. No reimbursement is required by this act pursuant to
32 Section 6 of Article XIII B of the California Constitution because
33 the only costs that may be incurred by a local agency or school
34 district will be incurred because this act creates a new crime or
35 infraction, eliminates a crime or infraction, or changes the penalty
36 for a crime or infraction, within the meaning of Section 17556 of
37 the Government Code, or changes the definition of a crime within

1 the meaning of Section 6 of Article XIII B of the California
2 Constitution.

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